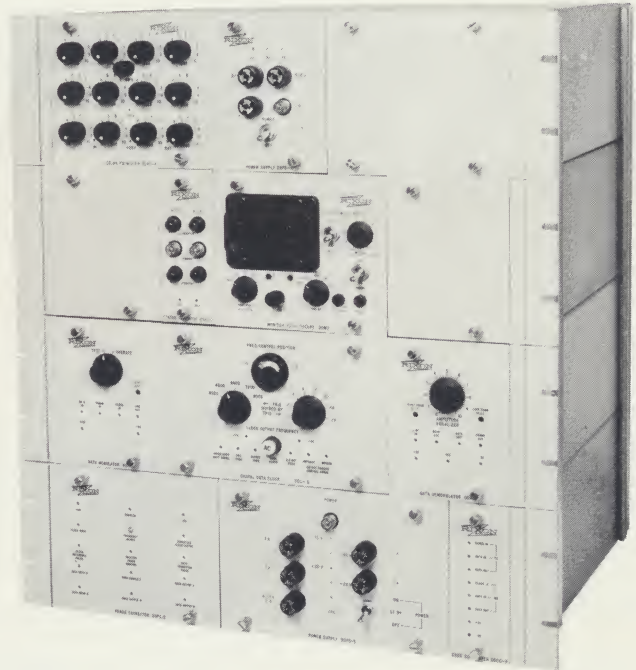


SEBIT-48M DATA SET

Available today for high speed
data transmission at 4800 bps



DESCRIPTION: The Rixon Sebit-48M Data Set is a high speed modem for transmitting and receiving serial digital data over telephone, cable, microwave, or other 3 KHz voice frequency communication circuits at speeds up to 4800 bits per second (600 characters per second). Built to comply with EIA RS-232 interface standards, it is compatible with a wide variety of EDP equipment. It is also available with a MIL-STD-188B interface.

APPLICATIONS: This data set is being used in many commercial and military data communication systems today. Its high speed is helping users to make more efficient and effective use of their processing equipment. It can double throughput to significantly cut batch transmission time, permits the addition of new system tasks as off-line time is gained and helps save labor costs and line charges.

MODULAR CONSTRUCTION: The Sebit-48M is made up of several basic modules plus a number of optional modules to provide a range of features to meet special application requirements. The illustration shows a typical configuration. It is designed for mounting in a standard 19" rack. The modem can be supplied with a cover or in a cabinet.

For application information and prices contact:

RIXON ELECTRONICS, INC.

2120 Industrial Parkway Silver Spring, Maryland 20904

Telephone 301-622-2121

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CIRCUIT REQUIREMENT: This modem transmits data over a Type 3005 (Schedule 4, Type 4C) telephone circuit as specified in FCC Tariff 260, "Private Line Services." Type 3005 circuits are voice channels which have been conditioned for data transmission. The 48M is designed to comply with tariff regulations that provide for the use of customer owned data sets with telephone company circuits.

OPERATION: The Sebit-48M is intended for continuous, unattended operation. Lower transmission speeds of 4500, 4000, 3600, 3200, 2400 bps and lower can be switch selected. This feature permits the user to continue to transmit data in case of a communication circuit degradation or other system malfunction.

DIAGNOSTIC CAPABILITY: The inclusion of a status indicator (SI) and a monitor oscilloscope (MO) module gives the 48M a built-in diagnostic capability. This insures continuous optimum system operation, helps isolate operating problems and simplifies maintenance. In case of a malfunction, the SI shows the element of the system at fault; either the terminal equipment, communication circuit or data set. It also provides a qualitative error rate. The MO is used to isolate malfunctions within the data set itself. Where two or more 48M's are co-located, a single MO can be used for diagnostic checks of all the data sets.

OPERATION THEORY: The 4800 bit per second transmission rate is achieved through use of a modulation technique called vestigial sideband. Most data sets use modulation schemes that transmit just one bit per cycle of the telephone line bandwidth. Vestigial sideband permits two data bits to be transmitted per cycle, literally doubling the capacity of the line. So data is transmitted reliably at 4800 bps over circuits normally carrying 2400.

TECHNICAL SUMMARY

Data Rate	4800 bits per second (600 characters per second). Lower speeds can be switch selected.
Modulation	Two-level, AM, vestigial sideband, lower sideband is transmitted.
Operation	Synchronous. Both transmit and receive clock signals are provided.
Carrier Frequency	3000 Hz
Modulation Index	85 percent
Line Requirement	Type 3005 (4C) wireline circuit
Interface	All interfaces in accordance with EIA Standard RS-232. MIL-STD-188B interface optional.
Operating Modes	Full duplex, half duplex or simplex
Line Output Level (From Modulator)	Adjustable from -20 to +3 dbm into a 600 ohm load (normally set at -8 dbm).
Line Input Level (To Demodulator)	-35 to +5 dbm
Power Requirement	115 volts AC, 60 Hz, 1.5 amp. 220 volts AC with factory wiring change.
Mechanical Specifications	21" high x 19" deep x 19" wide. 125 pounds.
Environmental Requirements	Ambient temperature range: 32° - 122°F. Up to 95% relative humidity.

Specifications subject to change without notice.